A.O. SMITH

# BOOSTER HEATER SIZING FOR COMMERCIAL DISHWASHERS GAS/OIL

Sizing based on 40° temperature rise and 20 psi water pressure.

Oil-fired booster heaters shown only where they are believed to be applicable.

All HW models, when used as boosters, require safety flow switch. see section A 001.0.

Only basic models of dishwasher machines are listed.

Flow rate on HW models must match GPM of dishwasher.

Chart assumes 100% usage of dishwasher.

Recommended sizes of gas-fired heaters are based on natural gas ratings. For use on other gases, see heater specification sheets for possible variation from natural gas ratings.

*Reflect lower GPH/GPM requirements published in the most current NSF Directory. Contact manufacturer for appropriate GPH requirements. Dishwasher manufacturers may offer options that change hot water usage requirements.

| Manufacturer and Model No. | 180° Rinse | | Recommended A.O. SMITH Heaters | |
|---|---|---|---|---|
| | GPM | GPH | Gas | Oil |
| **A-F** | | | | |
| SA, VA | 12.0 | 60 | BT-65 | |
| SP | 20.0 | 75 | BT-65 | |
| **Adamation** | | | | |
| CA, CA-1, CA2M, SL-3 | 9.0 | 540 | GW-300,HW-300,BTH-199,BTP-270,BTR-250 | COF-245 |
| CA-1* | 3.0 | 181 | BTR-120 | |
| CA-2 | 7.2 | 432 | GW-200,HW-200M,BTH-199,BTP-199,BTR-180 | COF-199 |
| 10-2 | 5.9 | 354 | GW-200,HW-160M,BTH-120,BTP-199,BTR-154 | COF-199 |
| CSL1390 | 6.9 | 414 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| CSL1390* | 4.9 | 294 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| CA-2*, CA-3, CA-3SR, CA-3SW CA-4, CA-4SR, CA-4SW, CA-4SW/SR | 4.3 | 258 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| **All Southern Fabricators** | | | | |
| ASD-L, ASD-R | 5.9 | 354 | GW-200,HW-160M,BTH-120,BTP-199,BTR-154 | COF-199 |
| **Auto-Chlor** | | | | |
| AC-44, AC-44-RC | 2.0 | 120 | BT-100 | |
| **Burns Chemical Systems** | | | | |
| A-2 | 7.8 | 63 | BT-65 | |
| B-2 | 15.6 | 126 | BT-100 | |
| C-2 | 7.8 | 63 | BT-65 | |
| **Champion** | | | | |
| T-6A | 6.7 | 69 | BT-65 | |
| T-7A, T-7AC, T-7 | 7.2 | 74 | BT-65 | |
| 20-KB, 20-KFWB, 20-KPRB 20-BK-2-1, 20-KFWB-2-1, 20-KPRB-2-2, 30-KB, 30-FWKB, 30-KPRB, 30-KB-2-1, 30-KFWB-2-1, 30-KPRB-2-2 | 6.9 | 417 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| 40-KB, 40-KFWB, 40-KPRB, 40-KB-2-2, 40-KFWB-2-2, 40-KPRB-2-3, 60-KB, 60-KFWB, 60-KPRB, 60-KB-2-2 60-KPRB-2-3, 60-KFWB-2-2, PR-96, PR-120 | 6.7 | 402 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| 60-KPRB-2-3*, 60-KPRB*, 60-KB* 60-KFWB*, 60-KB-2-2* | 4.7 | 282 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| 64-KB, 64-KFWB, 64-KPRB, 64-KB-2-2 64-KFWB-2-2, 64-KPRB-2-3 | 7.8 | 468 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| 64-KB*, 64-KPRB* | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| U-H1, U-HB | 3.2 | 33 | BT-65 | |
| D-H1, D-HB | 5.1 | 66 | BT-65 | |
| UC-116-1T, VC-CA | 10.3 | 620 | GW-300,HW-300,BTH-250,BTP-270,BTR-275 | COF-315 |
| UC Series 2T& 3T | 5.6 | 336 | GW-200,HW-160M,BTH-120,BTP-139,BTR-154 | COF-199 |
| UC-CW Series 2T, UC-CW Series 3T | 7.1 | 426 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| PR-120* | 4.7 | 282 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| Auto Dish Proces | 7.8 | 465 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| W-6 | 16.2 | 972 | GW-400,HW-399,BTR-500 | COF-455 |
| W-6* | 14.2 | 852 | GW-400,HW-399,BTR-365 | COF-385 |
| 44-KB, 44-KPRB, 44-KB Corner, 44-KPRB Corner 54-KB, 54-KPRB, 54-KPRB Corner | 5.4 | 324 | HW-160M,BTH-120,BTP-139,BTR-154 | COF-199 |
| 44-WS, 66-WS | 2.2 | 130 | BT-100 | |
| UC-C4 | 5.6 | 336 | GW-200,HW-160M,BTH-120,BTP-139,BTR-154 | COF-199 |



Downloaded from www.Manualslib.com manuals search engine

| Manufacturer and Model No. | 180° Rinse | | Recommended A.O. SMITH Heaters | |
|---|---|---|---|---|
| | GPM | GPH | Gas | Oil |
| **Champion (Continued)** | | | | |
| K-L44, K-L66 | 5.3 | 321 | HW-160M,BTH-120,BTP-139,BTR-154 | |
| 40-KB*, 40-KFWB*, 40-KPRB*, 40-KB-2-2* | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| 40-KPRB-2-2*, 40-KPRB-2-3*, 60-KB*, 60-KB-2-2*, 60-KB-2-3*, 60-KFWB-2-2*, 60-KB-2-2*, 60-KB-2-3* 60-KFWB-2-2*, 64-KB Corner, 64-KPRB Corner | | | | |
| USN72-250, USN72-185, USN72-135, USN72-85, USN72-60 | 4.8 | 285 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| W-6-WS | 7.7 | 460 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| UC-CW8-WS | 3.8 | 225 | HW-120M,BTR-120 | |
| UC-CW6-WS | 3.2 | 190 | BTR-120 | |
| **Chemical Methods Assoc** | | | | |
| CMA-44H | 3.2 | 192 | BTR-120 | |
| HTS, HTSB, HTC, HTCB | 1.0 | 52 | BT-65 | |
| **Classic Glass & Dishwashing Sys** | | | | |
| H850 | 1.8 | 46 | BT-65 | |
| H500, H750 | 1.6 | 19 | BT-65 | |
| **Cunningham** | | | | |
| A50, B50, 1F | 7.5 | 93 | BT-65 | |
| **Ecolab** | | | | |
| ES-4400, ES-6600, ES-8000 | 3.9 | 234 | HW-120M,BTP-139,BTR-120 | |
| ES-18 | 5.5 | 57 | BT-65 | |
| Supra-Q2020 | 7.6 | 52 | BT-65 | |
| **Elkington** | | | | |
| S16(T,D,DT,DTC) | 6.9 | 54 | BT-65 | |
| S20(T), EB(T,TC), RWG(T,TC), RW7(T,TC) | 8.0 | 64 | BT-65 | |
| GC44, 6D54, PC12 | 8.0 | 480 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| GDX60 (70,80,90), PC12 (15,22,24)* | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| **Fearless** | | | | |
| 112(T) | 5.3 | 57 | BT-65 | |
| 233(C,T,CT) | 6.6 | 75 | BT-65 | |
| 44(C,T,CT) | 8.3 | 100 | BT-65 | |
| SC1020 | 4.1 | 45 | BT-65 | |
| 1C16 | 7.5 | 450 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| 377 | 9.0 | 540 | GW-300,HW-300,BTH-199,BTP-270,BTR-250 | COF-245 |
| 408, 410, 415 | 7.0 | 420 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| **FMC** | | | | |
| 103, 104 | 15.0 | 62 | BT-65 | |
| 204 | 24.0 | 100 | BT-65 | |
| **Foley** | | | | |
| A3,A5,A7,A9,A11 | 2.6 | 45 | BT-65 | |
| **G.S. Blakeslee** | | | | |
| D-8 | 9.7 | 132 | BT-100 | |
| A-7 | 6.8 | 52 | BT-65 | |
| B-7, BC-7, DC-7, D-7 | 10.6 | 117 | BT-100 | |
| A6, AT6 | 12.0 | 60 | BT-65 | |
| B4, B6, BC6, BCT6 | 11.0 | 118 | BT-100 | |
| D4, D6, DC6, DCT6, D40, D60 | 12.0 | 133 | BT-100 | |
| 2-E, 2-ER, 2-L, 2-LR, 2-M, 2-MR, 3-E, 3-L, 3-M F2, F2-E, F2-ER, F2-L, F2-LR, F2-M, F2-MR F3, F3-E, F3-L, F3-M, FA2-E, FA2-ER, FA2-L, FA2-LR FA2-M, FA2-MR, FA3-E, FA3-L, FA3-M FA2-MR, FA3-E, FA3-L, FA3-M R-33, R-PEE, R-LL, R-PLL, R-MM, R-PMM R-EEE. R-LLL, R-MMM F-EE, F-PEE, F-LL, F-PLL, F-MM, F-PMM, F-EEE F-LLL, F-MMM, FA-EE, FA-PEE, FA-LL, FA-PLL FA-MM, FA-PMM, FA-EEE, FA-LLL, FA-MMM | 6.8 | 408 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| D-8* | 1.3 | 72 | BT-65 | |
| F-1, F1-E, F1-ER, F1-L, F1-LR, F1-MR, F-E, F-PE F-L, F-PL, F-M, F-PM, R-E, R-PE, R-L, R-PL, R-M, R-PM 1-E, 1-ER, 1-L, 1-LR, 1-M, 1-MR PC4, SC4, 86PT, 66PT3, EC4, MC4 | 7.0 | 420 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| XF-EE, XF-PEE, XF-LL, XF-PLL, XF-MM, XF-PMM XF-EEE,XF-LLL,XF-MMM,XFA-EE,XFA-LLL,XFA-MMM XF2, XF2-E, XF2-ER, XF2-L, XF2-LR, XF2-MR XF3, XF3-E, XF3-L, XF3-M, XFA3-E, XFA3-L, XFA3-M | 9.0 | 540 | GW-300,HW-300,BTH-199,BTP-270,BTR-250 | COF-245 |
| 66PT2 | 10.0 | 600 | GW-300,HW-300,BTH-250,BTP-270,BTR-250 | COF-315 |
| XF1-E, XF1-ER, XF1-L, XF1-LR, XF1-M, XF1-MR XFA1-E, XF-E, XF-PE FX-I, FX-PL, FX-M, FX-PM | 12.0 | 720 | GW-300,HW-300,BTR-305 | COF-315 |



Downloaded from www.Manualslib.com manuals search engine

| Manufacturer and Model No. | 180° Rinse | | Recommended A.O. SMITH Heaters | |
|---|---|---|---|---|
| | GPM | GPH | Gas | Oil |
| **G.S. Blakeslee (Continued)** | | | | |
| R-CC64, R-PCC, R-EE, R-PEE*, R-LL*, R-PLL* | 4.5 | 270 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| R-MM*, R-PMM*, R-EEE*, R-LLL*, R-MMM* | | | | |
| F-EE*, FA-EE*, F-PEE*, FA-PEE*, F-LL*, FA-LL* | 4.8 | 288 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| F-PLL*, FA-PLL*, F-MM*, FA-MM*, F-PMM*, FA-PMM* | | | | |
| F-EEE*, FA-EEE*, F-LLL*, FA-LLL*, F-MMM*, FA-MMM* | | | | |
| XF-EE*, XF-PEE*, XF-LL, XF-PLL*, XF-MM*, XF-PMM* | 2.8 | 166 | BT-100 | |
| XF-EEE*, XF-LLL*, XF-MMM* | | | | |
| R-M*, R-L*, R-PL*, R-PM* | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| F-E*, F-PE*, F-L*, F-PL*, F-M*, F-PM* | 4.7 | 282 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| XF-EE-LT, XF-PEE-LT, XF-LL-LT, XF-PLL-LT, XF-MM-LT | 2.8 | 166 | BT-100 | |
| XF-PMM-LT, XF-EEE-LT, XF-LLL, LT, XF-MMM-LT | | | | |
| R-CC64-LT, R-PCC-LT, R-EE-LT, R-PEE-LT, R-LL-LT | 2.2 | 134 | BT-100 | |
| R-PLL-LT, R-MM-LT, R-PMM-LT, R-EEE-LT, R-LLL-LT | | | | |
| R-MMM-LT | 2.2 | 134 | BT-100 | |
| D-9 | 31.5 | 96 | BT-65 | |
| UC-21A, UC-21B | 4.3 | 22 | BT-65 | |
| **General Electric** | | | | |
| SK10, SK20B, SK101 | 7.0 | 77 | BT-65 | |
| ST50 | 10.5 | 77 | BT-65 | |
| ST501 | | | | |
| SK50B, 50-20, 50SMT | 9.3 | 103 | BT-65 | |
| ST30B | 7.0 | 51 | BT-65 | |
| SS40B, SS48B, SS62B, SS70B, SS76B, SS84B | 7.1 | 426 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| SS64B, SS80B, SS86B, SS102B, SS100B, SS116B | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| 85DA, 115-20, 135DA, 165-20, 185DA, 225-20, 250DA | 6.7 | 402 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| 275-20 | | | | |
| 60DA | | | | |
| SW82,SW83 | 9.8 | 588 | GW-300,HW-300,BTH-250,BTP-270,BTR-250 | COF-245 |
| SW80A, SW82A, SW84A | 9.0 | 540 | GW-300,HW-300,BTH-199,BTP-270,BTR-250 | COF-245 |
| SK501, SK60B | | | | |
| **Gresham** | | | | |
| 50T50, 50T60 | 10.4 | 115 | BT-100 | |
| **Hobart** | | | | |
| A-19T-2, AM-12*, AM-12C*, AM-14* | 8.0 | 64 | BT-65 | |
| AM-14C* | | | | |
| UM-4, UM-4D, UMP-4, UM-C4, UM-C4D, UMP-C4 | 5.0 | 70 | BT-65 | |
| UMP-C4D, UMP-4D | | | | |
| WM-1, WM-1D, WMP-1, WMP-1D, WM-C1, WMP-C1 | | | | |
| WM-5* | 3.5 | 37 | BT-65 | |
| SM-6T2 | 6.8 | 52 | BT-65 | |
| LM-3T3 | 9.5 | 126 | BT-100 | |
| AM-8T2,AM-9T2,AM-3CT2,AM-10,AM-11C,AM-12,AM-12C | 8.9 | 91 | BT-65 | |
| AM-8T3, AM-9T3, AM-9CT3, | | | | |
| C-44, CRS-66, CWS-66, CPW-80, C-54 | 7.5 | 450 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| CFS-66, CRS-76, CWS-76, CPW-90 | | | | |
| XM4 | | | | |
| C-44 after 1 '89 | 5.3 | 320 | HW-160M,BTH-120,BTP-139,BTR-154 | |
| C-64, CRS-86, CWS-86, CFS-86, CPW-100, C-81 | 6.7 | 402 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| CRS-103, CWS-103, CFS-103, CPW-117, CS-100, CS-117 | | | | |
| C-44A | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| CRS-66*, CPW-88* | 5.2 | 310 | HW-160M,BTH-120,BTP-139,BTR-154 | |
| FFM, FFB, FFW | 10.0 | 36 | BT-65 | |
| WM-5 | | | | |
| FT200, FT-300, FT-300RS, FT-319, FT-800 | 7.8 | 468 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| FT-400 | 7.1 | 426 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| FT-500 | 7.0 | 420 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| FT-600 | 7.2 | 432 | GW-200,HW-200M,BTH-199,BTP-199,BTR-180 | COF-199 |
| FT-700 | 7.6 | 458 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| FT-700* | 6.6 | 396 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| FT-800* Series | 5.7 | 342 | GW-200,HW-160M,BTH-120,BTP-199,BTR-154 | COF-199 |
| FT-800S Series | 6.5 | 390 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| FT-820 | 5.7 | 342 | GW-200,HW-160M,BTH-120,BTP-199,BTR-154 | COF-199 |
| AM-14T | 5.7 | 70 | BT-65 | |
| CRS-66A | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| CRS-66AW | 2.0 | 120 | BT-100 | |
| CRS-76A | 6.2 | 372 | GW-200,HW-160M,BTH-150,BTP-199,BTR-154 | COF-199 |
| C-64A, CRS-86A, CCS-86A, CPW-100A | 4.6 | 278 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| C-64W, CRS-86W, CCS-86W, CPW-100W | 3.2 | 192 | BTR-120 | |
| FT-800W Series | 3.6 | 216 | HW-120M,BTR-120 | |
| FT-800WA Series | 2.1 | 122 | BT-100 | |



Downloaded from www.Manualslib.com manuals search engine

| Manufacturer and Model No. | 180° Rinse | | Recommended A.O. SMITH Heaters | |
|---|---|---|---|---|
| | GPM | GPH | Gas | Oil |
| **Hobart (Continued)** | | | | |
| FT900 | 5.4 | 324 | HW-160M,BTH-120,BTP-139,BTR-154 | COF-199 |
| FT900W | 3.3 | 198 | BTR-120 | |
| FT900S | 6.5 | 390 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| FT800SA | 2.1 | 126 | BT-100 | |
| LX-18 | 8.0 | 73 | BT-65 | |
| LX-18H | 4.0 | 38 | BT-65 | |
| LX-40H, LX-30H, LX-30, LX-GH | 6.0 | 36 | BT-65 | |
| C-66AW | 2.0 | 120 | BT-100 | |
| FTX-TCL1… | 2.0 | 120 | BT-100 | |
| FTX-9-S-B… | 2.1 | 126 | BT-100 | |
| AM-14TC, AM-14F | 5.7 | 68 | BT-65 | |
| C-44AW | 2.0 | 120 | BT-100 | |
| C-54A | 6.2 | 372 | GW-200,HW-160M,BTH-150,BTP-199,BTR-154 | COF-199 |
| CCS-66A | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| CCS-66AW | 2.0 | 120 | BT-100 | |
| CCS-76A | 6.2 | 372 | GW-200,HW-160M,BTH-150,BTP-199,BTR-154 | COF-199 |
| CPW-80A | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| CPW-80AW | 2.0 | 120 | BT-100 | |
| CPW-90A | 6.2 | 372 | GW-200,HW-160M,BTH-150,BTP-199,BTR-154 | COF-199 |
| **Insinger** | | | | |
| D-12 | 6.0 | 360 | GW-200,HW-160M,BTH-150,BTP-199,BTR-154 | COF-199 |
| Ensign 40-2 | 8.0 | 61 | BT-65 | |
| Commander 17, 18, Commodore 15, 50sa | 10.9 | 120 | BT-100 | |
| Adm. 120-5, 120-6, 120-7, 60-1, 60-2, 66-1, 66-2 | 6.9 | 416 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| Mini S9 thru S12 | 8.0 | 480 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| 45SA | 8.0 | 61 | BT-65 | |
| 50-20 | 10.9 | 120 | BT-100 | |
| Mas RC-18RPW-EW-3 all | 8.0 | 480 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| Adm RC-12FPW all | 8.0 | 480 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| Clp RC-16FPW-EW-2 all, RC-16FPW-EW-3 all | 8.0 | 480 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| Mas HRC-16FPW-EW-3 all | 8.0 | 480 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| Mas RC-18 all, Mas RC-18FPW all, Mas RC-18RPW all | | | | |
| Mas RC-18RPW-W all, Mas RC-16RPW-W all | 6.5 | 389 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| Trac 321 | 4.4 | 264 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| Adm RC-12RPW all | 10.0 | 600 | GW-300,HW-300,BTH-250,BTP-270,BTR-250 | COF-315 |
| Speeder 5, 6, 86-1, 86-2, Clipper 9, 96-1 | 7.0 | 420 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| Super 8, 106-1, 106-2, F-106-1, Master 165-DA-3 | | | | |
| 50-DA, 60-DA, 85-DA, 85-DA7 | | | | |
| 115-DA, 135-DA, 165-DA, 185-DA, 225-DA, | | | | |
| 250-DA, 275-DA | | | | |
| 250-20, 185-20, 135-20, 85-20, 60-20 | 6.6 | 397 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| Clp RC-15 all, Clp RC-16FPW all, Clp RC-16RPW all | 7.2 | 432 | GW-200,HW-200M,BTH-199,BTP-199,BTR-180 | COF-199 |
| Super R-106-2A | 7.5 | 450 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| Adm 44, Adm 66-3 | 3.5 | 210 | HW-120M,BTR-120 | |
| Adm 44-4, 66-4 | 2.7 | 162 | BT-100 | |
| Speeder 64, 86-3 | 3.7 | 222 | HW-120M,BTR-120 | |
| Super 106-2 | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| R-106-2 | 2.0 | 240 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| 250-20*, 185-20, 135-20, 85-20, 60-20 | 4.6 | 277 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| Master RC-##-RPW-W | 6.0 | 361 | GW-200,HW-160M,BTH-150,BTP-199,BTR-154 | COF-199 |
| Clipper RC-##-RPW-W* | 3.7 | 222 | HW-120M,BTR-120 | |
| Century 14 | 3.8 | 228 | HW-120M,BTP-139,BTR-120 | |
| Defender-## | 5.1 | 306 | HW-160M,BTH-120,BTP-139,BTR-154 | |
| Trac 321* | 2.8 | 168 | BT-100 | |
| Ensign 40-2 | 8.0 | 61 | BT-65 | |
| Commander 18-4, Commander 18-4H | 2.6 | 59 | BT-65 | |
| 50-20N2-NSU | 5.3 | 90 | BT-65 | |
| Commander 18-3 | 5.3 | 90 | BT-65 | |
| **Jackson** | | | | |
| 10A, 10AB, 10ARPB, 10ARPB-H, 10ARPB-M | 7.8 | 58 | BT-65 | |
| 50APR, 40APRB | 8.9 | 67 | BT-65 | |
| JV-24A, JV-24AF, JV-24B, JV-24BV, JV-24BJ, JV-24BF | 7.1 | 52 | BT-65 | |
| JL-100A, JL-100B, 100, 100B, JL-100 | 12.0 | 110 | BT-65 | |
| JL-100PRB, JL-100PR | 10.5 | 97 | BT-65 | |
| J-44, SJF-44, 44C, 39C | 6.9 | 414 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| 4-A, DJHF-48, 4-ARD | 5.0 | 302 | HW-160M,BTH-120,BTP-139,BTR-154 | |
| 6-A, DJF-60, 6-ARD, Rotor Drive Jr | 5.0 | 268 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| DJF-64, 13Z3 thru 26Z3 | 4.7 | 278 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| 100, 150 | 9.6 | 100 | BT-65 | |
| 200, 200B | 5.0 | 52 | BT-65 | |


Downloaded from www.Manualslib.com manuals search engine

| Manufacturer and Model No. | 180° Rinse GPM | 180° Rinse GPH | Recommended A.O. SMITH Heaters Gas | Recommended A.O. SMITH Heaters Oil |
|---|---|---|---|---|
| **Jackson (Continued)** | | | | |
| AJ-44CE, ES-4400, AJ-66CE, ES-6600, AJ-80CE, ES-8000 | 3.9 | 234 | HW-120M,BTP-139,BTR-120 | |
| AJ-54CE, AJ-76CE, AJ-90CE | 5.8 | 350 | GW-200,HW-160M,BTH-120,BTP-199,BTR-154 | COF-199 |
| AJ-64CE, AJ-86CE, AJ-100CE | 3.7 | 222 | HW-120M,BTR-120 | |
| 200, 200B | 5.0 | 52 | BT-65 | |
| JB-24B, JB-24BF, M-24BF, JP-24, JP-24F | 6.6 | 26 | BT-65 | |
| ES-18, Tempstar, Tempstar SDS, | 5.5 | 57 | BT-65 | |
| Performer | 7.2 | 71 | BT-65 | |
| Supra-Q2020 | 7.6 | 52 | BT-65 | |
| **Knight Inc** | | | | |
| KLE 112HL | 6.9 | 70 | BT-65 | |
| **McGraw-Edison** | | | | |
| TKM-20 | 6.6 | 70 | BT-65 | |
| TKM-27, TKMC-27 | 10.4 | 116 | BT-100 | |
| TKM-44, TKM-62, TKM-66R, TKM-66 | 7.0 | 420 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| TKM-64, TKM-80, TKM-86R, TKM-102R | 8.0 | 480 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| TKM-96, TKM-96R | 7.6 | 456 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| TKM-113R, 114, 114R, 115, 115R | 10.4 | 624 | GW-300,HW-300,BTH-250,BTP-270,BTR-275 | COF-315 |
| TKM-215->TKM-217, TKM-317->TKM-324 | 6.9 | 414 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| **Meiko Maschinen** | | | | |
| BS560V3B | 12.4 | 744 | GW-300,HW-300,BTR-365 | COF-315 |
| B460KNV, B46KNVA, B690KNV, B690KNVA | 5.9 | 354 | GW-200,HW-160M,BTH-120,BTP-199,BTR-154 | COF-199 |
| **Meiko Maschinenbau Gmbh** | | | | |
| B 230 VAP | 1.0 | 85 | BT-65 | |
| BA 323 P-CU3B | 5.8 | 346 | GW-200,HW-160M,BTH-120,BTP-199,BTR-154 | COF-199 |
| BA 133 PC | 1.9 | 114 | BT-100 | |
| **Metalwash** | | | | |
| RT-36, RT-42 | 24.0 | 60 | BT-65 | |
| RT-84 | 10.0 | 150 | BT-100 | |
| RT-472 | 18.0 | 150 | BT-100 | |
| RS-30 | 12.0 | 90 | BT-65 | |
| **Metos Div. Instrument Arium** | | | | |
| MASTER 500, 520 | 6.4 | 62 | BT-65 | |
| MARINE B-210, C-210 | 7.3 | 441 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| MASTER B-300, C-300 | 4.6 | 278 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| **Moyer Diebel Limited** | | | | |
| 401-HT, 401-HTN | 3.5 | 36 | BT-65 | |
| 500HT, 500UT, 501 HT, 501 HTN, 501 UT | 3.6 | 38 | BT-65 | |
| MH6N, MH6O | | 5.1 | 66 | BT-65 |
| **Stero** | | | | |
| SR-1RA | | 6.9 | 67 | BT-65 |
| 40SMT16 | | 6.9 | 78 | BT-65 |
| SF-2RA, SF-2DRZ, SF-2DRA | | 10.4 | 103 | BT-65 |
| SDRA, SD-2RA | | 6.2 | 92 | BT-65 |
| 40SMT-20, 50SMT | | 10.4 | 92 | BT-65 |
| U-31-A | | 11.2 | 70 | BT-65 |
| SD-2RACA,44-10,SCT-54,SCT-76S,SCT-76SC, SCT-76SM<br>SCT-60, 64, 76, 80, 94,94S,94SC,94SM,108,108S,108SC<br>SCT-120SM, 120S, 120SC, 150, 150SM<br>50DA, 60DA, 75DA, 85DA, 115DA, 135DA, 165DA<br>185DA, 225DA, 250DA, 275DA<br>SC-1-SCT-64,SC-1-SCT-76,SC-1-SCT-80, SC-1-SCT-94<br>SC-1-SCT-108, SC-1-SCT-120, SC-5-SCT-64 | 6.9 | 417 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| SCT-44-CS, SCT-66S-CS | 2.6 | 155 | BT-100 | |
| SC-2-4, SC-6-4, SC-1-2-4, SC-1-6-4, SC-5-6-4, SC-5-2-4 | 7.2 | 432 | GW-200,HW-200M,BTH-199,BTP-199,BTR-180 | COF-199 |
| STPC-15, STPC-10, STPC-12, STPC-12HS, STPC-12PS<br>STPC-15PS, STPC-15HS | 7.8 | 465 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| STC-64 | 4.6 | 277 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| SC-1-SCT-44, SC-1-SCT-44-10, SC-1-SCT-54<br>SC-2-3-4, SC-6-3-4, SC-2-7-4, SCT-44-SC-3-4<br>SC-1-2-7-4, SC-1-6-3-4, SCT-154-SC-3-4<br>SC-5-2-3-4, SC-1-6-7-4, SC-5-6-3-4, SC-5-2-7-4<br>SCT-765-SC-3-4, SCT-76-S, SCT-76-SC, SCT-76-SM<br>SCT-76-SC-3-4, SCT-44-SC-1-3-4 | 6.9 | 417 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| SCT-44, SCT-44-10, SCT-66S*, SCT-76S*, SCT-76SC* | 4.8 | 290 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| SCT-76SM* | 5.2 | 315 | HW-160M,BTH-120,BTP-139,BTR-154 | |
| SC-2-4*, SC-6-4*,SC-1-2-4*,SC-1-6-4*,SC-5-6-4*,SC-5-2-4* | 5.0 | 301 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| SC-1-SCT-44*, SC-1-SCT-44-10* | 5.2 | 315 | HW-160M,BTH-120,BTP-139,BTR-154 | |
| SCT-54-SC-1-3-4 | 6.9 | 417 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| STPC-18, STPC-19, STPC-19PS, STPC-20, STPC-22<br>STPC-24, STPC-24D, STPC-26, STPC-26D, STPC-15 | 7.5 | 450 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |



Downloaded from www.Manualslib.com manuals search engine

| Manufacturer and Model No. | 180° Rinse GPM | 180° Rinse GPH | Recommended A.O. SMITH Heaters Gas | Recommended A.O. SMITH Heaters Oil |
|---|---|---|---|---|
| **Stero (Continued)** | | | | |
| STPCW-10, STPCW-12HS, STPCW-12PS | 9.6 | 576 | GW-300,HW-300,BTH-250,BTP-270,BTR-250 | COF-245 |
| STPCW-15HS, STPCW-15PS | | | | |
| STPCW-15, STPCW-18, STPCW-19, STPCW-19PS | 8.5 | 510 | GW-300,HW-300,BTH-199,BTP-270,BTR-250 | COF-245 |
| STPCW-20, STPCW-22, STPCW-24 | | | | |
| STPCW-24D, STPCW-26, STPCW-26D | | | | |
| U-31-A2 | 22.4 | 140 | BT-100 | |
| STW-110 | 4.5 | 270 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| U-31-AC | 11.2 | 70 | BT-65 | |
| SCT-44-LW, SCT-44-10-LW, SCT-66S-LW, SCT-76S-LW, | 2.0 | 120 | BT-100 | |
| SCT-76SC-LW, SCT-90S-LW, SC-6-4-LW, SC-1-6-4-LW, | | | | |
| SC-5-6-4-LW, SC-2-4-LW, SC-1-2-4-LW, SC-5-2-4-LW | | | | |
| SCT-90S | 4.8 | 290 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| SCT-68S, SCT-64*, SCT-94S*, SCT-94SC* | 3.8 | 226 | HW-120M,BTR-120 | |
| SCT-76*, SCT-108S*, SCT-108SC*,SCT-120S*,SCT-120SC* | 4.5 | 272 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| SCT-94SM*, SCT-120SM*, SCT-150SM* | | | | |
| SCT-44-SC-1-3-4*, SCT-44-SC-3-4*, SCT-44-10-SC-1-3-4 | 4.9 | 295 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| SCT-44-10-SC-3-4, SCT-54-SC-1-3-4*, SCT-54-SC-3-4 | | | | |
| SCT-76S-SC-3-4 | | | | |
| SC-6-7-4, SC-6-3-4*, SC-2-7-4*, SC-1-6-7-4*, SC-1-6-3-4* | 4.2 | 252 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| SC-1-2-7-4*, SC-5-6-7-4, SC-5-6-3-4*, SC-5-2-7-4* | | | | |
| STPC | 4.6 | 276 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| STPCW | 5.6 | 336 | GW-200,HW-160M,BTH-120,BTP-139,BTR-154 | COF-199 |
| STPC (4 Tank) | 3.8 | 228 | HW-120M,BTP-139,BTR-120 | |
| STPCW (4 Tank) | 3.9 | 234 | HW-120M,BTP-139,BTR-120 | |
| SCBT | 6.8 | 408 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| **Universal** | | | | |
| B, HLD, 45SMT | 7.0 | 53 | BT-65 | |
| D | 10.5 | 76 | BT-65 | |
| HDR | 7.5 | 83 | BT-65 | |
| RA3, RB3, RC3, 50SMT | 9.3 | 103 | BT-65 | |
| Y3 Series | 7.0 | 420 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| DA Series, J Series, MM4 Series, N4 Series | 6.7 | 402 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| 12A12 | 7.8 | 468 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| Z Series | 9.0 | 540 | GW-300,HW-300,BTH-199,BTP-270,BTR-250 | COF-245 |
| UZ | 9.9 | 588 | GW-300,HW-300,BTH-250,BTP-270,BTR-250 | COF-245 |
| **Unknown** | | | | |
| 100 GPH | 10.5 | 100 | BT-65 | |
| 125 GPH | 10.5 | 125 | BT-100 | |
| 150 GPH | 10.0 | 150 | BT-100 | |
| 175 GPH | 10.0 | 175 | BTR-120 | |
| 200 GPH | 4.2 | 200 | BTR-120 | |
| 225 GPH | 4.0 | 225 | HW-120M,BTR-120 | |
| 250 GPH | 4.2 | 250 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| 275 GPH | 4.6 | 275 | HW-120M,BTH-120,BTP-139,BTR-120 | |
| 300 GPH | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |
| 325 GPH | 5.4 | 325 | HW-160M,BTH-120,BTP-139,BTR-154 | COF-199 |
| 350 GPH | 5.8 | 350 | GW-200,HW-160M,BTH-120,BTP-199,BTR-154 | COF-199 |
| 375 GPH | 6.3 | 375 | GW-200,HW-160M,BTH-150,BTP-199,BTR-180 | COF-199 |
| 400 GPH | 6.7 | 400 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| 075 GPH | 7.0 | 75 | BT-65 | |
| 050 GPH | 5.0 | 50 | BT-65 | |
| **Vulcan-Hart** | | | | |
| CU-16BTA, CU-16BTF, R-16BTAS, R-16BTF, R-16E | 6.6 | 66 | BT-65 | |
| 3D20T, 2D20TF, CD20T, CD20TF | 10.3 | 120 | BT-100 | |
| A-44, A-44F, A-44P, A-54, A-54F, A-54P | 8.0 | 480 | GW-200,HW-200M,BTH-199,BTP-199,BTR-197 | COF-199 |
| A-64, A-64F, A-64-3, A-64-3F, A-64-3P | 8.5 | 510 | GW-300,HW-300,BTH-199,BTP-270,BTR-250 | COF-245 |
| A-81, A-81F, A-81P, A-81-4, A-81-4F, A-81-4P, A-81-6 | | | | |
| A-81-6F, A-81-6P, A-98-4, A-98-4F, A-98-6, | | | | |
| A-98-6F, A-98-6P | | | | |
| 3D20TF, CD20TF | 9.0 | 94 | BT-65 | |
| CP-3 Series, HP-3 Series, CP-2 Series | 7.0 | 420 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| AR215 thru 221, AR320 thru 326 | 7.0 | 420 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| A44*, A44P*, A54*, A54P* | 7.1 | 426 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| A-64P*, A-64*, A-64-3*, A-64-3P*, A-81-4*, A-81-4P* | 6.7 | 402 | GW-200,HW-200M,BTH-150,BTP-199,BTR-180 | COF-199 |
| **Wells** | | | | |
| S-16T | 6.9 | 77 | BT-65 | |
| AD-20, AD-20M, AD-20B, AD-20MBC | 7.9 | 102 | BT-65 | |
| AD-44 | 7.9 | 484 | GW-200,HW-200M,BTH-199,BTP-270,BTR-250 | COF-245 |
| AD-64, AD-80, GDX-60, GDX-80, PC-19, PC-26, PC-12 | 5.0 | 300 | HW-120M,BTH-120,BTP-139,BTR-154 | |


© A. O. Smith Corp., 1999
Printed in U.S.A.
Downloaded from www.Manualslib.com manuals search engine